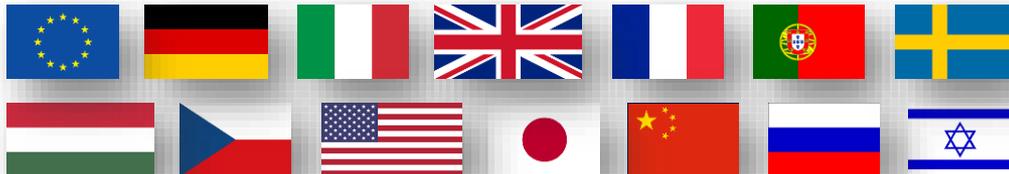




EUROPEAN PLASMA RESEARCH ACCELERATOR WITH EXCELLENCE IN APPLICATIONS

Work List and Issues Collected

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- Is the **concept OK** or do we need to adapt (laser+beam driven vs. One solution only, switchyard or many parallel accelerators, ...)?
- How far are we in our quest to **demonstrate on paper high quality beams** from plasma accelerators?
- Can we already make statements on **impact of imperfections and needed corrections**?
- Are the assumed **lasers** realistic or what needs to be done to get them ready?
- Do we need **additional measures** (triangular bunches with external injection, FODO type plasma channels, hybrid solutions, hollow plasmas, ...)?
- Do the **different work packages fit together correctly** or do we have inconsistencies? If we have inconsistencies, how do we resolve them?

- I learnt a lot this week and there is still a **wealth of material** to be looked at very carefully by myself.
- We discussed my questions and many other questions during these intense 4 days. A **few of my impressions** (not complete):
 - **Laser-driven, beam-driven and hybrid solutions all progress very well** with important synergy between the approaches (3 solutions but much less than 3 times the work).
 - We **start seeing promising solutions** for achieving energy, decent energy spread, emittance, peak current, ...
 - **Slice energy spread is** being better understood and to be watched
 - Method for **synchronizing external beams** with laser to sub-fs appearing
 - We need **to include realistic space** for diagnostics, beam transport, feedbacks, collimation, in/outcoupling of lasers/beams, ...
 - We need to **define 2nd study version over next months** with a limited number of clearly defined study cases.

- Atmosphere of friendliness, objectiveness and competence!
- We have excellent WP leaders and very professional collaborators in our project.
- Now: WP leaders will summarize the work done and the problems/results/solutions in more detail...
- We will analyze this carefully and use it as input for the next study version!